AMENDMENTS TO THE CLAIMS:

1. (Previously presented) An optical transmission apparatus for transmitting a wavelength-division multiplexed light from a first optical transmission line to a second optical transmission line, comprising:

a first optical amplifier for amplifying a first wavelength-division multiplexed light received from the first optical transmission line;

a first chromatic dispersion compensator for compensating for chromatic dispersion of said first wavelength division multiplexed light caused during the transmission of said first wavelength-division multiplexed light from a first predetermined position on said first optical transmission line to said optical transmission apparatus;

an add drop portion for dropping an optical signal of a predetermined band from said first wavelength-division multiplexed light and adding an optical signal of a certain band with said first wavelength division multiplexed light and outputting a second wavelength-division multiplexed light;

a second chromatic dispersion compensator for compensating for chromatic dispersion of said second wavelength division multiplexed light caused during the transmission of said second wavelength-division multiplexed light between said optical transmission apparatus and a second predetermined position on said second optical transmission line;

a second optical amplifier for amplifying said second wavelength division multiplexed light output from the second chromatic dispersion compensator; and

a controller for controlling said first optical amplifier by in response to a first number of wavelengths included in said first wavelength-division multiplexed light and for controlling said second optical amplifier in response to a second number of wavelengths included in said second

wavelength-division multiplexed light, wherein the second number is computed by subtracting number of dropped wavelengths in said optical signal of a predetermined band as dropped by said add drop portion from said first number and adding number of added wavelengths in said certain band as added by said add drop portion.

Claims 2-4 (Cancelled)

5. (Previously presented) An optical transmission apparatus for transmitting a wavelength-division multiplexed light from a first optical transmission line to a second optical transmission line, comprising:

an optical amplifier for amplifying said wavelength-division multiplexed light received from said first optical transmission line;

a first chromatic dispersion compensator for compensating for chromatic dispersion caused during the time in which said wavelength-division multiplexed light produced from said optical amplifier is transmitted from a first predetermined position on said first optical transmission line to said optical transmission apparatus;

an add drop portion an optical signal of a predetermined band from said for dropping an optical signal of a predetermined band from said wavelength-division multiplexed signal produced from said first chromatic dispersion compensator, and for multiplexing an optical signal of a certain band with said wavelength-division multiplexed light from which said optical signal of said predetermined band has been dropped;

a second chromatic dispersion compensator for compensating for chromatic dispersion caused during the time in which said wavelength-division multiplexed light produced from said

add drop portion is transmitted between said optical transmission apparatus and a second predetermined position on said second optical transmission line;

a gain tilt compensator for compensating for the gain tilt between the wavelength of the output signal from said optical amplifier;

an optical power detector for detecting an optical power of said wavelength division multiplexed light fed to said optical amplifier; and

a controller for controlling said gain tilt compensator according to an optical power detected by said optical power detector and pre-stored gain tilt characteristics of said optical amplifier.

Claim 6-11 (Cancelled)

12. (Previously presented) A chromatic dispersion compensating method for receiving wavelength-division multiplexed light from a first optical transmission line and supplying the received light to a second optical transmission line, said method comprising the steps of:

amplifying said wavelength-division multiplexed light received from said first optical transmission line by an optical amplifier;

detecting an optical power of said wavelength division multiplexed light fed to said optical amplifier;

compensating for gain tilt between wavelength of an output signal from said optical amplifier according to said detected optical power and pre-stored gain tilt characteristics of said optical amplifier;

compensating for chromatic dispersion caused during the time in which said amplified wavelength-division multiplexed light is transmitted from a first predetermined position on said first optical transmission line until said light is received;

dropping an optical signal of a predetermined band from said dispersion-compensated wavelength-division multiplexed light;

multiplexing an optical signal of a particular band with said wavelength-division multiplexed light from which said optical signal of said predetermined band has been dropped; and

compensating for chromatic dispersion caused during the time in which said wavelength-division multiplexed light with which said optical signal of said certain band has been multiplexed will be transmitted to a second position on said second optical transmission line.

13. (Previously presented) An optical transmission apparatus according to claim 1, wherein said first number of wavelengths is extracted by the optical transmission apparatus from an optical supervisory channel signal included in said first wavelength-division multiplexed light.

14. (Previously presented) An optical transmission apparatus according to claim 5, wherein said pre-stored gain tilt characteristics indicate relationships between gain tilt characteristics of said optical amplifier and light power input to said optical amplifier.

15. (Previously presented) An optical transmission apparatus according to claim 12, wherein said pre-stored gain tilt characteristics indicate relationships between gain tilt characteristics of said optical amplifier and light power input to said optical amplifier.

16. (New) An optical transmission apparatus for transmitting wavelength-division multiplexed light from a first optical transmission line to a second optical transmission line, comprising:

an optical amplifier for amplifying wavelength-division multiplexed light received from said first optical transmission line;

a first chromatic dispersion compensator for compensating for chromatic dispersion caused during the time in which the wavelength-division multiplexed light received at the optical amplifier was transmitted from a first predetermined position on said first optical transmission line to said optical transmission apparatus;

an add drop portion for dropping an optical signal of a predetermined band from a wavelength-division multiplexed light produced from said first chromatic dispersion compensator, and for multiplexing an optical signal of a certain band with wavelength-division multiplexed light from which said optical signal of said predetermined band has been dropped;

a second chromatic dispersion compensator for compensating for chromatic dispersion caused during the time in which wavelength-division multiplexed light produced by the multiplexing in said add drop portion will be transmitted between said optical transmission apparatus and a second predetermined position on said second optical transmission line;

a gain tilt compensator for compensating for the gain tilt between the wavelengths of an output signal from said optical amplifier;

means for detecting optical power of the wavelength-division multiplexed light fed to said add drop portion from said first chromatic dispersion compensator;

means for detecting the optical power of said dropped signal;

means for extracting information as to number of wavelengths multiplexed in the wavelength-division multiplexed light received at the optical amplifier, from an optical supervisory channel signal included in said received wavelength-division multiplexed light; and

a controller for controlling said gain tilt compensator;

wherein said controller controls said gain tilt compensator to estimate the gain tilt between the wavelengths of the wavelength-division multiplexed light fed to said add drop portion using said extracted wavelength multiplex number information, said detected optical power of said wavelength-division multiplexed light fed to said add drop portion and the detected optical power of said dropped signal, and to compensate for said gain tilt.